REMARKS

Claims 1 to 34 are pending in the present application. Claims 1, 15, 22 and 32 are the independent claims.

In the Official Action, dated 10/9/03, claims 1-13 and 15-34 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 6,073,128 (Pongracz et al.) in view of U.S. Patent No. 6,145,088 (Stevens). Claim 14 was rejected under 35 U.S.C. § 103(a) over Pongracz et al. in view of Stevens, and further in view of U.S. Patent No. 6,038,379 (Fletcher et al.). The outstanding rejections to the claims are respectfully traversed.

Summary of the Invention

The present invention provides a way to restore a target object such as a volume, directory or a pre-defined collection of files to a particular time by restoring the last full backup embodying the backup target, the last computed cumulative backup embodying the backup target and possibly the incremental backups after the last computed cumulative backup, if there are any that relate to change in the backup target.

For instance, in an exemplary embodiment generally corresponding to claim 1, the invention provides a method for generating backup files in a computer system including generating a full backup file corresponding to a first time for a set of objects in the computer system and generating one or more incremental files for the set of objects afterwards, *wherein the one or more incremental files each are associated with the collective set of objects*. The method further includes identifying a target object within the set of objects for the generation of cumulative backup files and then generating off-line one or more

cumulative backup files corresponding to a second time (after the first time) for the target

object.

Pongracz et al. and the Rejection under 35 U.S.C. § 103(a)

The outstanding rejections to claims 1-34 under 35 U.S.C. § 103(a) are respectfully

traversed.

In sum, Applicant respectfully submits that the remarks set forth by Applicant in the

remarks accompanying the RCE, filed August 18, 2003, were not addressed in the

outstanding Official Action since the position of the previous Official Action has merely been

repeated with the additional allegation that "it is obvious to apply the combination of

Pongracz and Stevens to create a specialized system that creates backup, incremental and

cumulative associated with an entire collection of files." This additional statement is either an

admission by the Office that the present invention patentably defines over the combination of

Pongracz and Stevens (because it admits that the combination of Pongracz and Stevens

together fails to teach Applicant's invention), or an arbitrary bald-faced assertion that does

not satisfy the Administrative Procedure Act's requirement that agency decisions be non-

arbitrary. See, *In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002) ("This factual question…

[relating to the obviousness inquiry cannot] be resolved on subjective belief and unknown

authority… It must be based on objective evidence of record.").

In particular, the point that Applicant had hoped would be addressed with particularity

is that Applicant understands Pongracz et al. merely to disclose systems and methods that

operate on files individually to create a list of files for backup purposes, and therefore,

Pongracz et al. cannot be said to teach or suggest a system that creates backup, incremental

and cumulative information associated with **an entire collection of files**, e.g., an entire volume or partition.

In support of Applicant's position, at Col. 3, lines 42-49 and Col. 4, line 60 to Col. 5, line 7, Pongracz et al. discloses to build **a list** of backup file records of all types of backup files **corresponding to the file name** and resent stamp received. Applicant submits that maintaining separate backup data for each file in the file system and then scanning that list (See, e.g., Col. 5, line 60 to Col. 6, line 27) teaches the opposite of generating a full backup for the set of objects, and generating incremental and cumulative files corresponding to the collective set of objects (more than one file), as with Applicant's invention.

Accordingly, Pongracz et al. cannot be said to teach or suggest a method for generating backup files in a computer system and includes generating a full backup file for a set of objects, then generating incremental file(s) for the set of objects wherein each of the incremental file(s) is associated with the set of objects, identifying a target object within the set of objects for the generation of cumulative backup file(s) and generating those cumulative backup file(s) for the target object off-line (**claim 1**), a method for generating backup files in a computer system, comprising generating a full backup file corresponding to a first time for a set of objects in the computer system, generating incremental file(s) for the set of objects after the first time, wherein each of the incremental file(s) is associated with the set of objects, identifying a target object within the set of objects for the generation of cumulative backup files and generating cumulative backup file(s) corresponding to a second time, after the first time, for the target object, wherein generating of the cumulative backup file(s) includes analyzing incremental file(s) generated between the first and second time (**claim 15**), a computer system comprising a plurality of servers having connection(s) to a

communications network and a plurality of storage components for the storage of backup

information for a plurality of target objects in the form of full, incremental and cumulative

backup information, wherein the incremental and cumulative backup information is

associated with the collection of the plurality of target objects, wherein the full backup

information is generated at a first time and the cumulative backup information is generated at

a second time, wherein the storage components are accessible over the connection(s) via the

plurality of servers, wherein the cumulative backup information is generated off-line and

wherein the plurality of target objects may be efficiently reconstructed to the second time

associated with the cumulative backup information (**claim 22**) or a computer system

comprising a plurality of servers having connection(s) to a communications network and a

plurality of storage components for the storage of backup information for a plurality of target

objects in the form of full, incremental and cumulative backup information, wherein the

incremental and cumulative backup information is associated with the collection of the

plurality of target objects, wherein the full backup information is generated at a first time and

the cumulative backup information is generated at a second time, wherein the storage

components are accessible over the connection(s) via the plurality of servers, wherein the

plurality of target objects may be efficiently reconstructed to the second time associated with

the cumulative backup information and wherein the generation of a cumulative backup file

includes the analysis of incremental file(s) generated after the first time associated with the

full backup information (**claim 32**).

        If Applicant is misunderstanding Pongracz et al., Applicant respectfully requests

clarification as to the particular language of Pongracz et al. that discloses generating a full

backup for a collective set of objects, and generating incremental and cumulative files

corresponding to the collective set of objects (more than one file at the same time).

Stevens was cited for reasons relating to off-line operation, and Fletcher et al. was

cited for reasons relating to storage block mappings and formatting, but neither Stevens nor

Fletcher et al. cure the above-identified deficiency of Pongracz et al. with respect to

Applicant's claimed invention. Specifically, none of Pongracz et al., Stevens and Fletcher et

al., taken alone or in combination, teach or suggest generating backup files in a computer

system and includes generating a full backup file for a set of objects, then generating

incremental file(s) for the set of objects wherein each of the incremental file(s) is associated

with the set of objects, identifying a target object within the set of objects for the generation

of cumulative backup file(s) and generating those cumulative backup file(s) for the target

object off-line, as recited in claim 1, and similarly in claims 15, 22 and 32.

Claims 2-14, 16-21, 23-31 and 33-34 depend from claims 1, 15, 22 and 32, either

directly or indirectly, and are believed allowable for the same reasons. Withdrawal of the

rejection to claims 1-34 under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

Applicant believes that the present Amendment is responsive to each of the points

raised by the Examiner in the Office Action, and submits that Claims 1-34 of the application

are in condition for allowance. Favorable consideration and passage to issue of the

application at the Examiner's earliest convenience is earnestly solicited.

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